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## PATENT ABSTRACTS OF JAPAN

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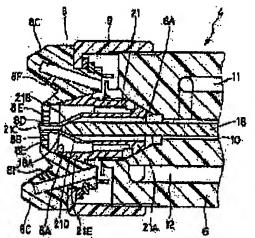
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## (54) AIR SPRAY GUN TYPE ELECTROSTATIC COATING APPARATUS

(57)Abstract:

PROBLEM TO BE SOLVED: To keep coating particles immediate after spraying in earth potential, to electrically charge the particles immediately by high voltage from external electrodes, and to improve the quality of resultant coated surface by installing an earth electrode near a coating spraying aperture.

SOLUTION: An air nozzle 8 and a coating nozzle 21 are installed at the tip end of a spray gun main body 6, the spray gun main body 6 and the air nozzle 8 are made of insulating resin, the coating nozzle 21 is made of a metal material, and a coating spraying aperture 21C of the coating nozzle 21 is projected out of the air nozzle 8. Then, the coating spraying aperture 21C of the air nozzle 21 is connected to an earth through a coating with low resistance which flows in a coating supplying route 10, so that the nozzle is used as an earth electrode. Coating particles immediate after they are sprayed lower the dielectric polarization effect and are immediately kept in the earth potential and then the



particles bear negative electric charge by negative high voltage from external electrodes. Consequently, the charged coating particles are prevented from adhering to parts which bear negative electric charge, e.g. the air nozzle 8, and staining of the coated surface is suppressed.

## LEGAL STATUS

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